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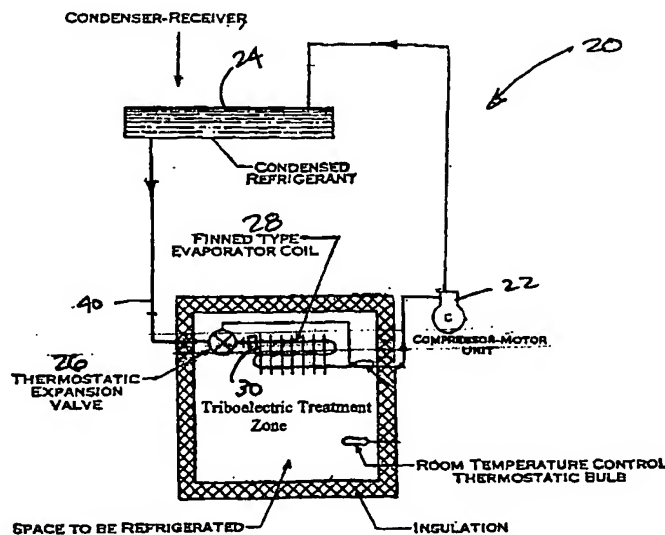
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(54) Title: METHOD AND APPARATUS FOR ENHANCING HEAT PUMP AND REFRIGERATION EQUIPMENT PERFORMANCE



(57) **Abstract:** A vapor compression apparatus and a method for operating a vapor compression system are provided. A working fluid is conveyed through a vapor compression system having a fluid line. A charging element is connected to the fluid line to direct an electric charge into working fluid. The electric charge is operable to disrupt intermolecular forces and weaken intermolecular attraction to enhance expansion of the working fluid to the vapor phase, increasing the capacity, performance and efficiency of the system components, and reducing system cycling mechanical wear and energy consumption.